

**Please enter the following claims:**

1-47. (canceled)

48. (currently amended) A method of making a transgenic female mouse, comprising the steps of:

- (a) providing a recombinant nucleic acid comprising;
  - i. a Tet operator response element and a minimal promoter;
  - ii. a nucleic acid encoding ovine FSH $\beta$  operatively associated with said Tet operator response element and said minimal promoter;
  - iii. an FSH $\beta$  promoter;
  - iv. an FSH $\beta$  locus control region operatively associated with said FSH $\beta$  promoter; and
  - v. a nucleic acid encoding a ligand-controllable receptor operatively associated with said FSH $\beta$  promoter, wherein said ligand-controllable receptor is a tetracycline-controllable transactivator fusion protein, and wherein tetracycline or an analog thereof acts as a ligand for said transactivator fusion protein; and wherein said receptor binds to said Tet operator response element in the presence of said ligand when expressed in a host cell; and
- (b) introducing said nucleic acid construct into a fertilized mouse oocyte;
- (c) implanting said oocyte in a pseudopregnant female mouse; ~~and then~~
- (d) ~~raising said transgenic female mouse to viability from said oocyte in~~ obtaining a chimeric offspring from said host; and then
- (e) mating said chimeric offspring to obtain a transgenic female mouse whose genome comprises and expresses said nucleic acid, wherein said transgenic female mouse produces greater levels of FSH $\beta$  and greater numbers of oocytes when administered said ligand than when not administered said ligand.

49-50. (canceled)

51. (original) The method of claim 48, wherein said introducing step is carried out by microinjection.

52. (original) The method of claim 48, wherein said nucleic acid comprises linear nucleic acid.

53-56. (canceled)

57. (currently amended) A method of enhancing the production of oocytes in a transgenic mouse, comprising the steps of:

(a) providing a transgenic mouse made by the method of claim 48, and

(b) administering said ligand to said mouse in an amount effective to (i) stimulate the production of FSH $\beta$  in said mouse above that found in a corresponding untransformed animal; and (ii) stimulate the production of oocytes in said mouse to a level greater than that found in the corresponding untransformed mouse.

58-60. (canceled)

61. (previously presented) The method of claim 57, further comprising the step of harvesting said oocytes from said animal.

62. (previously presented) The method of claim 57, wherein said administering step is followed by the step of:

(c) mating said mouse to produce a litter of offspring therefrom, the size of said litter being greater than the size of a litter produced by the corresponding untransformed mouse.

63. (previously presented) The method of claim 57, wherein said administering step is carried out by feeding said ligand to said mouse.

64-70. (canceled)

71. (new) A transgenic female mouse whose genome comprises and expresses a recombinant nucleic acid, said recombinant nucleic acid comprising:

- i. a Tet operator response element and a minimal promoter;
- ii. a nucleic acid encoding ovine FSH $\beta$  operatively associated with said Tet operator response element and said minimal promoter;
- iii. an FSH $\beta$  promoter;
- iv. an FSH $\beta$  locus control region operatively associated with said FSH $\beta$  promoter; and
- v. a nucleic acid encoding a ligand-controllable receptor operatively associated with said FSH $\beta$  promoter, wherein said ligand-controllable receptor is a tetracycline-controllable transactivator fusion protein, and wherein tetracycline or an analog thereof acts as a ligand for said transactivator fusion protein; and wherein said receptor binds to said Tet operator response element in the presence of said ligand when expressed in a host cell;

wherein said transgenic female mouse produces greater levels of FSH $\beta$  and greater numbers of oocytes when administered said ligand than when not administered said ligand.